

## REMARKS

### **Claim Amendments**

The claim amendments made above are in response to objections made by the Examiner in the Office Action mailed 06/22/2010 (objections discussed further below), to correct minor grammatical errors and/or to make wording clearer and/or more consistent throughout.

The new claims are narrower versions of other claims and given the limitations involved should not add significantly to the Examiner's burden. Applicant believes that there are no additional fees due for the new claims, but in the event that this is incorrect, the USPTO is hereby authorized to charge any such required fee (or credit any overcharge) to Deposit Account Number **504222**.

The Examiner commented in the Office Action mailed 06/22/2010 (hereafter called "the present Office Action") that claims 14-16 were listed in the previous response as amended when they were not. Applicant notes that this appears to be the case and apologizes for the error, but notes that it appears that they were at least amended since the original filing. They are actually currently amended with this response.

### **Allowable Subject Matter**

Applicant gratefully acknowledges the Examiner's conclusion concerning allowability of the subject matter of claims 11 and 12. Applicant may or may not agree with each of the reasons the Examiner gives here. The objection to these claims is addressed below.

### **Response to Arguments**

Applicant is pleased that the Examiner has found arguments in the previous response in this case to be persuasive and that the corresponding rejection has been withdrawn. The new grounds mentioned will be addressed below.

**Claim Objections**

Claims 1 and 17 have been amended changing "saponifiable" to "unsaponifiable" in response to the Examiner's corresponding objection.

Applicant has left claims 11 and 12 depending from claims 1 and 10, despite the Examiner's objection here, since Applicant believes that claims 1 and 10 are allowable. This is discussed further below.

Claims 14-16 have been amended as the Examiner suggested in response to his corresponding objection.

In light of these amendments and discussion, Applicant believes that all objections to the claims have been overcome and should be withdrawn.

The remarks below as to rejections are made in light of the claims as amended here of course. It is not believed that any of these rejections would apply to the new claims as they are merely narrower versions of other claims, and these rejections are traversed as to these other claims.

**Claim Rejections 35 USC 102**

Claims 1, 3-17 and 20 were rejected under 35 USC 102(b) as being anticipated by Dunlap as evidenced by a data sheet for Sylvatal D40LR.

Applicant notes (as did the Examiner) that Sylvatal D40LR is not the actual relevant material mentioned in Dunlap. Apparently, the Examiner could not find a data sheet for Sylvatal 40 DD which was the relevant material actually disclosed in Dunlap. Applicant does not understand why the Examiner did not make a request to Applicant for the correct data sheet before issuing the present Office Action; however, Applicant interprets the Examiner's comments in this rejection to be a Requirement for Information and has

submitted concurrently herewith a data sheet with the required information. Applicant requests that the Examiner make this data sheet of record in the case.

The Examiner may note that the tradename in this data sheet is Actinol S40DD and not Sylvatal 40 DD, but they are the same material. For some reason, it was decided at some point to change the tradename for this material. To summarize the most relevant points from this data sheet, this material is a distilled tall oil with a rosin acids content of 26-32% (typically 28%), a fatty acids content typically of 69.9% and an unsaponifiables content typically of 2.1%. This is significantly different from Sylvatal D40LR. Applicant requests that under the circumstances that the Examiner withdraw the rejection and only reassert it if applicable after considering the following.

In order to speed prosecution, Applicant will address the points made in this rejection in light of the new data sheet as applicable.

Applicant believes that the Examiner has misinterpreted the teachings of Dunlap in several respects. First, Dunlap looks at one distilled tall oil (some "earlier work" is also mentioned which might have looked at a second tall oil, but it is not characterized sufficiently to be used as a basis for a rejection here) versus a limited number of other materials; this hardly justifies a conclusion (based on Dunlap) that distilled tall oils are always superior as they do vary considerably in content, as do say crude tall oils (one of which was used by Dunlap for comparison). In any case, the distilled tall oil used in Dunlap was not the best at removing extractives in every case (see Table 3 on page 377).

Perhaps the most important issue is what was actually used in the testing in Dunlap. On page 368, it is revealed that the Sylvatal 40 DD was diluted to a 20% solution by the method of Farley, and it appears that this is what was used for the testing. Such an extreme dilution would change the ranges of the components significantly and depending on what the Farley method actually involved, might also cause other significant changes. It may also be of relevance that Dunlap does not equate neutrals and unsaponifiables as indicated on page 368 of this reference (see comments on the Sylvatal under Materials).

Doing the math, a 20% solution of Sylvatal 40 DD would have a rosin acids content of 5.2 to 6.4% which is outside the ranges in the rejected claims (about 20 to about 98% or about 35 to about 80%). In fact, even without dilution, the Sylvatal 40 DD is outside the range for rosin acids recited in claim 3 (26-32% versus about 35 to about 80%). Thus, considering the new data sheet in light of what was actually taught by Dunlap, Dunlap does not anticipate any of the rejected claims. The rejection should be withdrawn (and not reasserted in light of the new data sheet).

In any case, the new data sheet does not appear to in any way alter the Examiner's conclusion that the subject matter of claims 11 and 12 is allowable.

For completeness, Applicant will mention that distilled tall oils as a group make up a genus with lots of variation, and in any case, it is a well established maxim that a genus cannot anticipate a species. The Examiner may have said otherwise in comments he made in regards to claims 4, 5, 7, 8, 9, 10 and 15 in this rejection.

#### **Claim Rejections 35 USC 103 .**

The Examiner made two separate rejections here.

The first was an obviousness rejection of claim 21 over Dunlap. In this rejection, the Examiner asserts that it would be have been obvious to substitute birch for the aspen used in the reference for various reasons. Before reaching this issue, Applicant points out that as explained above, Dunlap actually discloses use of a 20% solution of the Sylvatal 40 DD which is outside the range required by claim 21, thus this rejection is traversed and should be withdrawn.

Even though it is not necessary to consider this to traverse this rejection, Applicant does not believe that the Examiner has made the point that the substitution of birch for aspen is obvious here. Applicant believes that it is well known to those of ordinary skill in the art that aspen has not been favored among hardwoods for pulping – this even seems to be

suggested in the very first sentences of Dunlap; thus not all hardwoods are “equal” in the world of pulping. Birch is a popular hardwood for pulping at least in Scandinavia as disclosed in the specification for the instant application (see around line 10 on page 1). The Examiner asserts (without any objective evidence) that since they are both hardwoods that aspen and birch would have similar fibers – apparently similar enough to be obvious substitutes here; this does not seem to be the case given how the pulping industry has treated these various woods.

Further, as discussed above, the results of Dunlap do not justify the generalizations reached by the Examiner. Dunlap shows that one distilled tall oil is better than one crude tall oil most (but not all) of the time for cooking aspen (this ignores the “earlier work” in Dunlap which is not given in detail but hardly justifies being the basis of the Examiner’s generalization even if considered here). This does not seem to be a good basis for it to be obvious to jump from crude tall oil treatment of birch to distilled tall oil treatment of birch.

The second obviousness rejection was to claims 1, 3-10, 13-17 and 20-21 over Dunlap in view of Magee. As explained above, Dunlap teaches using a 20% solution of the distilled tall oil (and this is the basis for traverse of the 102 rejection above using Dunlap and would also work to traverse any 103 rejection on Dunlap alone similarly); applying this to the data in Table 1 of Magee gives a range of resin acids (presumably the same here as rosin acids) of 6.4 to 16.6% (before corrected for neutrals which will lower the numbers in this range). Rosin acids are about 20 to about 98% or about 35 to about 80% in the rejected claims which are well above the ranges in Magee. Thus, the rejection is traversed and should be withdrawn.

Note that in the “earlier work” cited in Dunlap, it is uncertain what the tall oils used were as to composition or even at what dilution they were used. It is possible that none were even distilled tall oil. This work cannot then be used as a basis of rejection here or elsewhere.

It may be of note that neutrals and unsaponifiables are not equivalents in Dunlap as explained above. Magee lists compositions in terms of the acids and neutrals.

In any case, the Examiner has not given a good reason why it would have been obvious to use any of the distilled tall oils in Magee in the process of Dunlap. As already discussed, Dunlap shows that one distilled tall oil works better than a few other materials in such a process most (but not all) of the time. Distilled tall oils vary as to composition greatly, so why would it be obvious to substitute just any one for the one in Dunlap? As the Examiner admits, Dunlap itself does not even disclose the composition of the distilled tall oil used there.

Further, the Examiner uses the small sampling in Magee to generalize as to specific components of distilled tall oils in general. Also, there is the issue of picking and choosing from the laundry list of distilled tall oil alternatives in Magee with no guidance from the prior art. It may be of note that many of the distilled tall oils in Magee are not that close in composition to the Sylvatal 40 DD used in Dunlap even before dilution.

In his comments as to specific claims here, the Examiner has taken a few "liberties" in interpretation that seem excessive to Applicant. For example, as for claim 15, he assumes a position for double bonds and justifies this with a reference to MPEP 2112.01 – the problem here is that tall oils vary a lot and are not identical (or even nearly so) over their range, so this section of the MPEP is inapplicable. The Examiner is obligated to show something like this in a reference and not just make an assertion.

In his comments as for claim 21 here, the Examiner has basically repeated his argument for a birch substitution for aspen as used in the previous rejection. Applicant believes that insufficient reasons have been given for why this would be obvious and has explained this in detail above.

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**Conclusion**

In view of the amendments and remarks above, Applicant believes that the claims as amended are in a condition for allowance. Prompt allowance of all pending claims is respectfully requested. If it would be helpful in resolving any issues in this Application, the Examiner is invited to contact Applicant's attorney, Charles R. Richard, at 202-246-3320.

Date: 10/22/2010

Respectfully Submitted,

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### ACINTOL® S40DD DISTILLED TALL OIL

ACINTOL® S40DD is a source of light-colored tall oil fatty acid having a high tall oil rosin content. The utility of distilled tall oil fatty acid can be found in the long carbon chain ( $C_{18}$ ), acid function of the carboxyl group ( $-COOH$ ), or unsaturation of the double bonds. Plus, the rosin acid content adds "cling" and binding properties to such products as: asphalt antistripping agents, metalworking fluids, and rubber compounds. The ACINTOL S40DD derivatives are typically inexpensive soaps, amines, amides, and esters. The high rosin content in ACINTOL S40DD will produce very hard, water-resistant alkyd resins. These unique properties cannot be obtained with any other fatty acid type. In addition to the above-mentioned applications, ACINTOL S40DD has found use in concrete form release agents, soaps, and cleaners.

#### PRODUCT PROPERTIES

	Specifications	Typical Analysis
Color, Gardner, 1963	5 max.	5-
Acid Value	185 min.	185
Saponification Value		193
Titre, °C(°F)		2(35)
Composition:		
Moisture, %		<0.1
Ash, %		<0.01
Rosin Acids, %	26-32	28.0
Unsaponifiables, %		2.1
Fatty Acids Total, %		69.9
Specific Gravity, 25°/25°C		0.942
Weight Per Gallon, 25°C, lb		7.83
Viscosity, Gardner-Holdt, 25°C		C
Viscosity, cps, 25°C		85
Flash Point, Closed Cup, °C(°F)		204(400)

Method of Analysis:

Consult Bulletin No. 6131, "Methods of Analysis for Arizona Chemical Company Tall Oil Products".

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**ACINTOL® S40DD DISTILLED TALL OIL**

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<b>SAFETY INFORMATION:</b>	Please refer to Material Safety Data Sheet #6312
<b>AVAILABLE FORMS/PACKAGING:</b>	<ul style="list-style-type: none"><li>• Available in tank car, tank truck, and</li><li>• Lined (high-head) drums NET 435 lb</li></ul>
<b>SHIPPING POINT:</b>	<ul style="list-style-type: none"><li>• Port St. Joe, Florida</li></ul>
<b>BULK TERMINAL POINTS:</b>	<ul style="list-style-type: none"><li>• Philadelphia, Pennsylvania</li><li>• Chicago, Illinois</li><li>• Cincinnati, Ohio</li><li>• St. Louis, Missouri</li></ul>

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